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Mean Anomaly.		Correction to Var. Séc. Natl. No.	Logarm.	Mean Anomaly.	
55	305	−5·3+	−2·3+	125	235
60	300	−4·6+	−2·0+	120	240
65	295	−3·9+	−1·7+	115	245
70	290	−3·2+	−1·4+	110	250
75	285	−2·4+	−1·1+	105	255
80	280	−1·6+	−0·7+	100	260
85	275	−0·8+	−0·3+	95	265
90	270	−0·0+	−0·0+	90	270

Section VI. Table II.

Correction to R.

Sun's Longitude.		1860.	1870.	1880.	1890.	1900.	Sun's Longitude.	
280	280	−0·9+	−1·9+	−2·8+	−3·7+	−4·6+	100	100
290	270	−0·9+	−1·8+	−2·8+	−3·7+	−4·6+	90	110
300	260	−0·9+	−1·7+	−2·6+	−3·5+	−4·3+	80	120
310	250	−0·8+	−1·6+	−2·4+	−3·2+	−4·0+	70	130
320	240	−0·7+	−1·4+	−2·3+	−2·8+	−3·5+	60	140
330	230	−0·6+	−1·2+	−2·0+	−2·4+	−3·0+	50	150
340	220	−0·5+	−0·9+	−1·6+	−1·8+	−2·3+	40	160
350	210	−0·3+	−0·6+	−1·2+	−1·3+	−1·6+	30	170
360	200	−0·2+	−0·3+	−0·5+	−0·6+	−0·8+	20	180
10	190	−0·0	−0·0+	−0·0+	−0·0+	−0·0+	10	190

Extract from a letter from Professor J. C. Adams to Mr. Knobel.

'Mr. Innes is quite right in pointing out that the variation of the excentricity in the expression of the radius vector does not agree with that given in the definitive value adopted for the equation of the centre. It really agrees with the value of the variation of the excentricity given in page 53, which is that which is consistent with the masses of the planets which are assumed in page 49. The correction of the annual variation of the excentricity is given in page 55, in terms of the corrections of the planetary masses. The values of $2\delta e$ which result from the observations, chiefly those of Greenwich, are given on page 89, and these indicate a smaller value of the variation of the excentricity than that employed in the original theory.'

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Parallel Photographs of the Spectra of the Sun, of Iron, and of Iridium, from the Line (H) *to near the Line* (D), *in six sections. Also separate Photographs of the Spectrum of Titanic Iron Ore, in six sections.* By Frank M'Clean, M.A.

The photographs of the solar and metallic spectra now brought before the Society follow the same scheme as the "Photographs of the red end of the Solar Spectrum," presented by the writer in December 1888.

The division into sections and the scale (approximately) are the same as in Ångström's Normal Solar Spectrum. This plan has the advantage of always presenting the spectra in the same familiar divisions, and also of rendering these divisions suitable for direct comparison with Ångstrom's chart.

The present photographs comprise, in the first place, the first six sections of the solar spectrum numbered I. to VI. Taken along with the seven sections comprised in the "red end of the solar spectrum" previously given, and numbered 7 to 13, they complete the whole visible solar spectrum, from (H) to (A).

The present six sections of the solar spectrum are accompanied by corresponding and parallel photographs of the spectra of metallic iron, and of metallic iridium.

The iridium spectrum was fixed upon in order to obtain a full spark spectrum of air, for purposes of comparison. It shows Kirchhoff's iridium lines at wave-lengths 5299 and 5450. It also shows other unregistered lines, either of iridium or of air, which however can only be identified correctly when photographs of further spectra have been obtained. The air lines are present, more or less distinctly, in all spark spectra taken in air, and they supply a ready and accurate means of co-ordinating such spectra with the iron spectrum and with each other.

The iron spectrum was fixed upon on account of its close correspondence throughout with the spectrum of the Sun, and its thus furnishing the best means of co-ordinating the spectra of the other metals with the solar spectrum. The reference of the metallic spectra to the scale of wave-lengths established by Ångström's Normal Solar Spectrum is thus obtained, and it should be borne in mind that Ångström's spectrum is the only complete spectrum of any kind which has been determined to the scale of wave-lengths by direct observation.

It should be remembered that the photographs are only suitable for filling in the details of the spectra between the standard reference lines. Neither the spectroscope used nor the photographic impression is suitable for the accurate measurement of the angle of divergence between the standard lines themselves. A much more compact spectroscope with graduations and adjustments of the most perfect character would be absolutely necessary for such a purpose. The radical difference between measure-

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